

larger lobes with 2 to 4 pairs of pinnately arranged branches, elevated, glabrate beneath, bearing occasional short setiform hairs above; sori small, 2 or 3 (4) to each group of veinlets, occupying an irregular nearly medial zone between the costa and margin; indusium a pale brown, saecate, usually bilobate or trilobate, proximal scale; receptacle globose.

Type in the U. S. National Herbarium, no. 1,231,265, collected on the "Aripo Road, via Arima, on a bank between 3 and 3 $\frac{1}{4}$ mile posts," Trinidad, June 12, 1925, by A. Hombersley, this being the middle portion of a blade. Other material at hand consists of the apex and basal portions of a frond of the type collection; *Broadway* 6118, collected April 16, 1926, on the Blanchisseuse Road, near the 10 $\frac{1}{2}$ mile post; *Broadway* 5913, collected Jan. 29, 1926, on the Las Lapas Road; and an entire frond with apex of caudex, collected by Mr. Hombersley (no. 208), Jan. 29, 1926, on the "Las Lapas Road, on left, about $\frac{1}{2}$ mile from junction with Blanchisseuse Road, at 2000 ft. elevation."

This ample series of specimens shows no more than normal variation and indicates a species which, though allied to *H. Wilsoni* Hook.,² of Jamaica, Porto Rico, and Hispaniola, differs notably in size and essential characters. That species has, for example, the pinnae up to 85 cm. long, oblong, 12 to 25 cm. broad, the pinnules up to 14 cm. long, 1 to 2 cm. broad, long-acuminate to conspicuously attenuate at apex, and pinnatifid (rather than lobed) below that, the lobes 3 to 8 mm. long and 3 to 5 mm. broad, with 6 to 10 pairs of veins, the costae and veins bearing a few appressed *white* scales beneath, the numerous sori more than twice as large as those of *H. Hombersleyi*, and the huge indusium *whitish*, rather than pale brown.

ZOOLOGY.—*Fresh-water Ostracoda from Massachusetts*.¹ NORMA C. FURTOS, Western Reserve University. (Communicated by WALDO L. SCHMITT.)

The earliest reference to fresh-water Ostracoda in Massachusetts was a note by Haldeman in 1842 concerning a "*Cypris scabra*" taken from a small pond near Cambridge, but from the brief description given,² it is not possible to identify it with any known species. In 1905 Cushman reported and figured a new species, *Cyprinotus americanus*, from Nantucket, and in 1907 listed seven other species, none new, as follows: *Cypricerus passaicus* (syn. *Spirocypris passaicus*) from Wellesley; *Eucypris virens* (syn. *Cypris virens*) from Arlington; *Eucypris fuscata* (syn. *Cypris fuscata*) from Cambridge; *Eucypris reticulata* (syn. *Cypris reticulata*) from Brookline; *Cypridopsis vidua vidua* from West Cambridge, Cambridge, and Cohasset; *Cypria*

² Hook. in Hook. & Baker, Syn. Fil. 30. 1865; Maxon, Contr. U. S. Nat. Herb. 17: 416. pl. 18. 1914.

¹ Received August 15, 1935.

² "Shell modioliform rough, inflated, thickly covered with bristles; colour (of the dead shell) pale livid, or corneus. Length 1 $\frac{1}{2}$, height 1 millimeter." (Haldeman.)

(*Cypria*) *elegantula* (syn. *Cypria exsculpta*) from Woods Hole and Auburndale; *Candona candida* from Arlington and Auburndale. The above summarizes about everything that has been known concerning the fresh-water Ostracoda of Massachusetts. That a group of Crustacea as common and abundant as this should be so consistently overlooked by aquatic biologists is most surprising.

This report is based chiefly upon a series of collections taken by the author during June, July, and August of 1933 from various fresh-water pools, ponds, marshes, and rivers of Cape Cod and the Elizabeth Islands. Since only remnants of the spring fauna remain by early June, the number of species obtained has in no way exhausted the possibilities of the region. Six of the species recorded by Cushman do not appear in the present collection. Of the fourteen that were taken, three are new species and two new varieties of known species. As two, *Cypridopsis vidua vidua* (O. F. Müller) and *Cypria* (*Cypria*) *elegantula* (Lilljeborg), have already been reported by Cushman, they will not be further noticed in this paper. Besides the collections from the Cape, material received from the United States National Museum revealed two additional species from Hampshire County.

The work was done under the auspices of the Marine Biological Laboratory, Woods Hole, Mass., and the Biological Laboratory of Western Reserve University. Facilities at Woods Hole were made available through the kindness of Dr. M. H. Jacobs, the Director, and at Western Reserve University by Dr. J. Paul Visscher. Specimens of all species described have been deposited in the United States National Museum. In the case of holotypes and male paratypes, body parts are placed on permanent slides and valves in specially labelled vials.

Family CYPRIDAE

Subfamily CANDOCYPRINAE

Tribe CYCLOCYPRINI

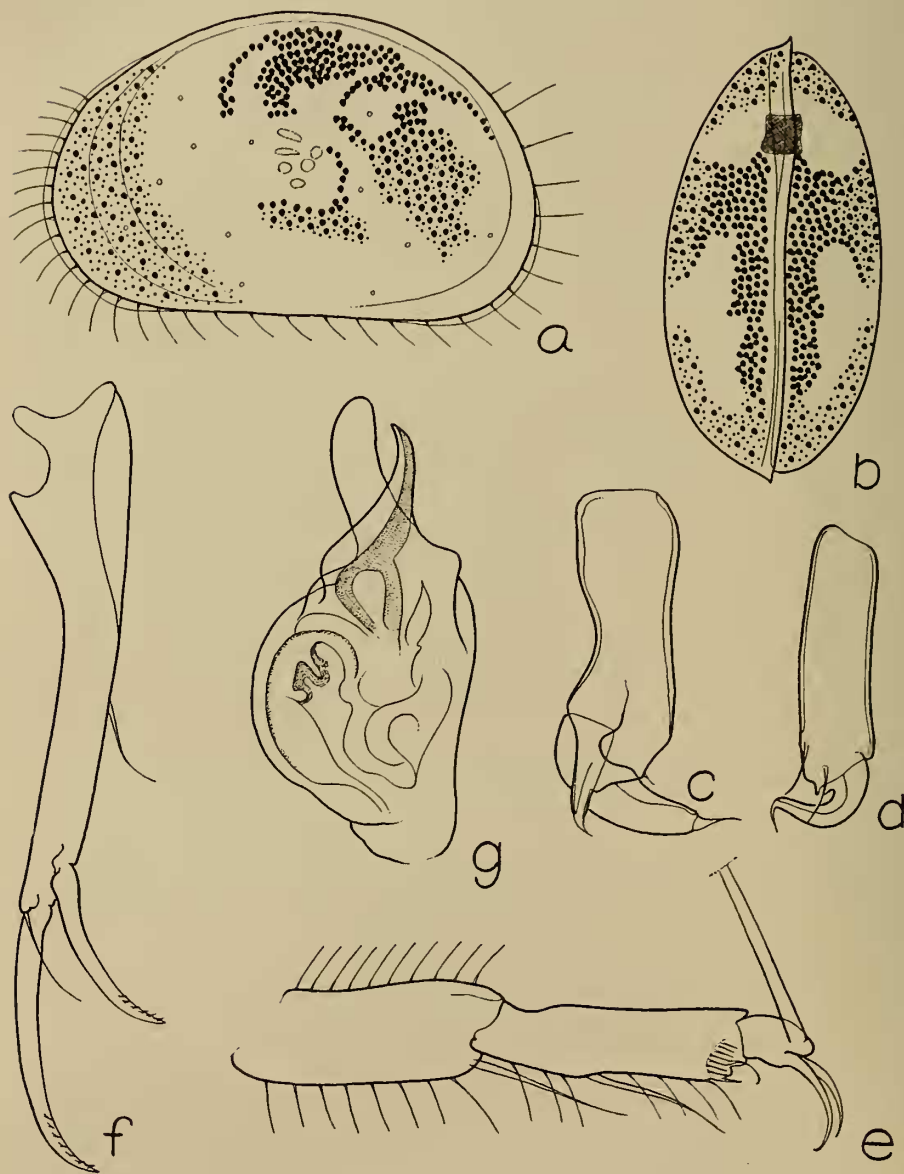
Genus CYPRIA Zenker, 1854

The genus is divided into two subgenera *Cypria* and *Physocypria*, according to the character of valve-margins. In *Cypria* margin of each valve is smooth while in *Physocypria* margin of right valve is distinctly tuberculated and that of left valve smooth.

Cypria (*Cypria*) *palustera* n. sp.

Fig. 1.

Specific characters—*Female*, from the side: Somewhat elongate, dorsal margin smoothly arched, ventral margin straight; height slightly less than two-thirds of length, highest just behind middle; extremities broadly rounded, the anterior broader; well developed hyaline border along an-



Furter

Fig. 1.—*Cypria (Cypria) palustera* new species. a, left valve, adult female; b, adult male, viewed from above; c-d, prehensile palps; e, scratch-foot, female; f, caudal ramus, female; g, penis.

terior, antero-ventral and posterior margins of left valve and along entire free margin of the right. From above: Moderately compressed, breadth slightly less than one-half of length, broadest in middle; left valve longer than right, extending clearly beyond right at each end; extremities narrowly rounded, the anterior somewhat narrower. Surface of valves smooth, with large scattered puncta, hairless except for a few slender marginal hairs. Color light brown with dark brown areas; one large diffusely pigmented area at anterior extremity, another darker dorso-lateral area behind ocular region, another diffuse area in postero-lateral region. Length 0.63, height 0.38, breadth 0.29 mm. Natatory setae of second antenna extend beyond tips of terminal claws by three times length of claws. The two short terminal setae of scratch-foot equal in length, one and one-half times longer than terminal segment. Caudal ramus only very slightly curved, ten times longer than narrowest width, dorsal margin smooth; dorsal seta about one-half length of subterminal claw, removed from claw by three times width of ramus; claws gently curved, decidedly subequal, each weakly denticulate near tip; terminal claw slightly exceeding one-half length of ramus; terminal seta one-third length of terminal claw.

Male smaller than female, otherwise similar. Length 0.55 mm. Prehensile palps unequal, the larger with propodus narrowest in middle by virtue of sinuate outer margin and with distal process extending beyond outer margin of sharply geniculate moderately inflated dactylus; propodus of smaller palp elongate, cylindrical, dactylus short, slender, hook-like. Ejaculatory duct with five crowns of spines. Penis with narrow globular base and two subequal terminal lobes, the larger lobe finger-like with rounded apex, the smaller narrowed, curved distally toward larger lobe.

C. ophthalmica (Jurine) may be distinguished from the above species by the more gibbous form of valves when viewed from the side, by the more nearly equal length of valves when viewed from above, by the character of the brown pigmentation which occurs as very small speckles over whole of valve surface, by the ciliated dorsal margin of caudal ramus and by less geniculate dactyli of prehensile palps. The pigmentation of *C. inequivalva* Turner (1895) appears to be rather similar to *C. palustera*, but when viewed from above the left valve projects beyond the right at anterior extremity only, and caudal ramus much more sharply curved with dorsal seta lacking. *C. javana* Muller (1906) may at once be distinguished from the species from Cape Cod by the very nearly equal valves when viewed from above and by the very elongate dorsal seta on caudal ramus.

Occurrence—Cape Cod: Type locality, marsh between Barnstable Village and East Sandwich (June 9, 1933). Fresh-water side pool of Salt Marsh, West Falmouth (June 16, 1933); pond on shore of Nonamesset Island (June 22, 1933). Female holotype, U. S. Nat. Mus. No. 71409. Male paratype, U. S. Nat. Mus. No. 71410.

***Cypria* (Physocypria) posterotuberculata n. sp.**

Fig. 2

Specific characters—*Female*, from the side: Somewhat elongate, height greater than one-half of length, highest behind middle; ascending slope of dorsal margin gently arched, descending slope steeper; extremities broadly

rounded, the anterior narrower; ventral margin of right valve straight, that of left slightly convex; valves very nearly equal, the left somewhat longer; posterior extremity of right valve with distinct row of tubercles extending beyond margin, anterior and ventral margins of same valve appear smooth, but under high power of microscope very obscure tubercles may be seen inside these margins; submarginal zone evident along anterior margin of left valve, pore-canals obscure; entire free margin of left valve with fairly wide hyaline border, anterior and posterior margins of right valve with

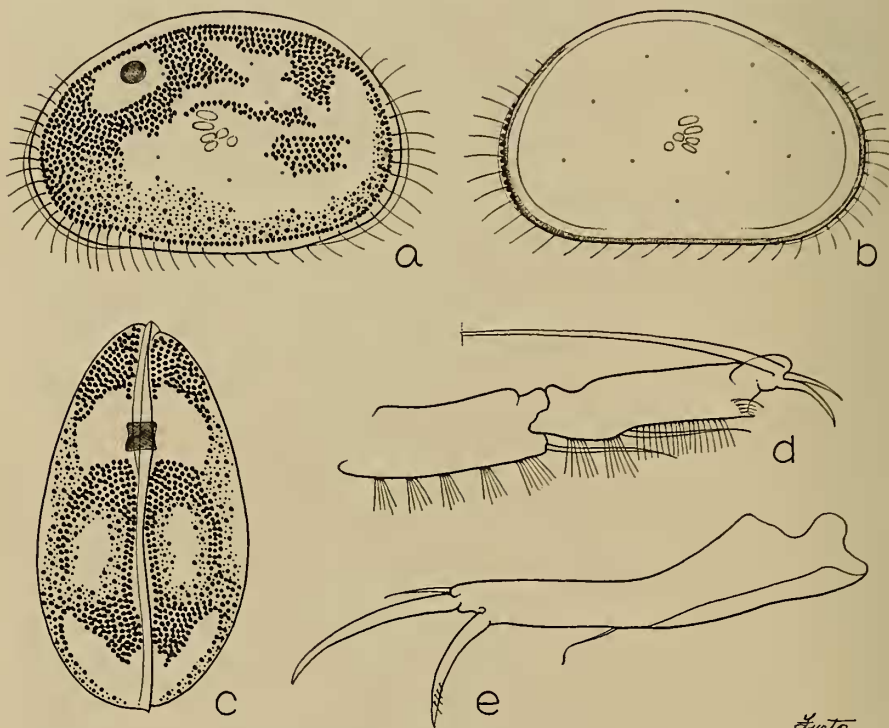


Fig. 2.—*Cypria* (*Physocypria*) *posterotuberculata* new species. a, adult female, viewed from left; b, right valve, adult female; c, adult female, viewed from above; d, scratch-foot, female; e, caudal ramus, female.

narrower border. From above: Moderately tumid, breadth exceeding one-half of length, broadest behind middle; sides evenly curved, extremities rounded, the anterior narrower; left valve enclosing the right, extending slightly beyond the right at each end. Surface of valves smooth, with a few scattered puncta and slender marginal hairs. Color light with narrow chestnut-brown band close to and parallel with all of valve margin including the dorsal, while in anterior portion of valve this band is diffusely widened to form a light brown patch which passing under eye as narrow band joins a dorso-lateral patch behind ocular region. Length 0.72, height 0.45, breadth 0.40 mm. Natatory setae of second antenna extend beyond tips of terminal claws by four times length of claws. The two short terminal setae of scratch-foot very nearly equal in length, the shorter about as long as terminal segment, the other slightly longer. Caudal ramus curved, nine and one-half

times longer than narrowest width, dorsal margin smooth; dorsal seta slightly exceeding one-half length of subterminal claw, removed from claw by somewhat less than three times width of ramus; claws decidedly subequal, gently curved, the subterminal with a comb of delicate denticles near tip, the terminal smooth, less than one-half length of ramus; terminal seta one-third length of terminal claw.

Male unknown.

Presence of distinct tubercles along posterior margin of right valve with smooth appearance of rest of margin, together with character of pigmentation serve to distinguish this species from others of the subgenus. The valves rather closely resemble *Cypria* (*Cypria*) *palustera* in proportions and coloration, but the latter is distinctly larger.

Occurrence—Cape Cod: Type locality, Palmer's Pond in Falmouth (Aug. 26, 1933). Female holotype, U. S. Nat. Mus. No. 71412. Paratypes, U. S. Nat. Mus. No. 71413.

***Cypria* (*Physocypria*) *globula* Furtos, 1933**

Cypria (*Physocypria*) *globula* Furtos, Ohio Biol. Survey Bull. 29 (Vol. 5, No. 6): 468-469, t.16, figs. 1-9. 1933.

A rather common species, occurring in ponds, marshes, small lakes and rivers from late March to October. Numerous records from Ohio and Florida as well as from Massachusetts indicate that the species is probably widely distributed over the eastern and mid-western sections of the United States.

Occurrence—Cape Cod: Lake Leman, Falmouth Hts. (June 9, 1933); Marston's Mills Pond near Hyannis (June 9, 1933); Quostinet River, Mashpee (June 9, 1933); Oyster Pond, Woods Hole (June 12, 1933); marsh near Sandwich (June 15, 1933); Oyster Pond, Falmouth (Aug. 26, 1934).

Genus *CYCLOCYPRIS* Brady & Norman, 1889

***Cyclocypris forbesi* Sharpe, 1897**

Fig. 3

Cyclocypris forbesi Sharpe, Bull. Ill. State Lab. Nat. Hist. 4: 432, 433, pl. 41, figs. 1-7. 1897.

Specific characters—*Male*, from the side: Sub-ovoid, height equal to two-thirds of length, highest behind middle; dorsal margin rather boldly arched with descending slope steeper than ascending slope; extremities broadly rounded, the anterior narrower; ventral margin slightly convex; pore-canal zone rather broad along free margin of right valve, the canals slender; pore-canal zone very narrow along margin of left valve, the canals obscure; right valve with narrow hyaline border along anterior and postero-ventral margins; left valve with similar border along postero-ventral margin while border along anterior margin is so much narrower that it is visible only under higher powers of microscope; pore-canal zone of each valve quite dark, longer canals each ending in a papilla bearing a slender marginal hair. From above: Moderately tumid, sides evenly curved, breadth three-fifths of length, broadest somewhat behind middle; right valve projecting beyond left at each end; anterior extremity somewhat pointed, the posterior nar-

rowly rounded. Surface with very sparsely scattered, but well defined dark brown tubercles, each bearing a slender hair; the tubercles particularly evident projecting beyond sides of valves when viewed from above. Entire surface with exception of small ocular areas delicately speckled with

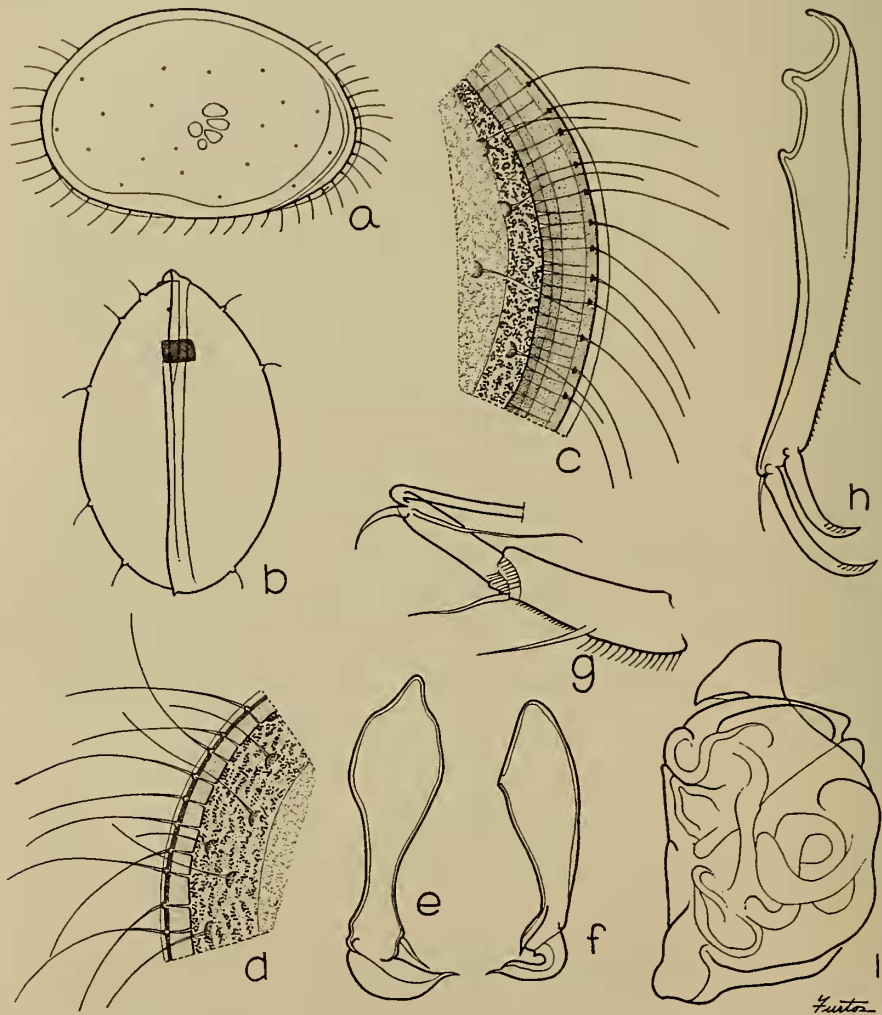


Fig. 3.—*Cyclocypris forbesi* Sharpe. *a*, right valve, adult male; *b*, adult male, viewed from above; *c*, anterior margin, right valve; *d*, anterior margin, left valve; *e-f*, prehensile palps; *g*, distal portion of scratch-foot; *h*, caudal ramus; *i*, penis.

chestnut-brown. Length 0.58, height 0.38, breadth 0.35 mm. Natatory setae of second antenna extend beyond tips of terminal claws by twice length of claws. Prehensile palps very much elongated for *Cyclocypris*, unequal in size, the larger with propodus widest near proximal end and with both outer and inner margins sinuated to form a narrow neck-like region near distal end, dactylus short, moderately inflated with outer margin smoothly curved,

inner margin approximately straight; propodus of smaller palp broadest near proximal end, outer margin convex, inner sinuated, dactylus short, narrow, hook-like. Terminal segment of scratch-foot four times longer than wide; the shortest terminal seta evenly curved, one-half length of segment. Caudal ramus gently curved, ten and one-half times longer than narrowest width, distal half of dorsal margin delicately ciliated; dorsal seta slightly greater than one-third length of subterminal claw, removed from claw by two and one-third times width of ramus; claws subequal, sharply curved at tips, weakly pectinate, terminal claw one-third length of ramus; terminal seta about one-third length of terminal claw. Ejaculatory duct quite small, with crowns of spines surrounding openings easily visible, the others quite obscure. Penis roughly quadrangular with a beak-like terminal lobe.

Occurrence—Cape Cod: Many males were taken from Weak's Pond in Falmouth (June 19, 1933). Otherwise known from Illinois.

Cyclocypris cruciata n. sp.

Fig. 4

Specific characters—*Male*, from the side: Stout, gibbous, height slightly exceeding one-half of length, highest somewhat behind middle; left valve longer and higher than right; ascending slope of dorsal margin straight in left valve, gently arched in the right; apex of right valve broadly rounded, that of the left narrower; descending slope of dorsal margin boldly arched in each valve; extremities broadly rounded, the anterior clearly narrower. Anterior margin of right valve with a rather conspicuous hyaline flange composed of two layers of approximately equal width, an outer reddish brown segmentally arranged layer with scalloped border and an inner more hyaline layer. The flange originates near postero-dorsal angle of anterior margin, extending to beginning of ventral margin where it ends abruptly. Anterior margin of left valve with an ordinary hyaline border comparable to inner layer of right valve-flange, does not end abruptly and without any evidence of curious scalloped structure characteristic of right valve. Submarginal line rather widely removed from anterior margin of left valve, pore-canals slender, each bearing a marginal hair; submarginal zone of right valve about one-half as wide; each valve with hyaline border lacking along ventral and posterior margins. From above: Tumid, ovoid, sides evenly curved, breadth equal to height, broadest slightly behind middle; anterior extremity pointed, the posterior broadly rounded; left valve projecting slightly beyond right at each end. Surface of valves smooth with a few scattered hairs near margins. Color light with dark blue bands so arranged that from above they appear as a large X crossing behind ocular region, while from the side the pigmentation extends over all of surface except ocular region and a larger dorso-lateral area behind the eye. Length 0.53, height 0.37, breadth 0.37 mm. Natatory setae of second antenna extend beyond tips of terminal claws by not quite length of claws. Prehensile palps small, propodi rather short, roughly cylindrical, approximately equal in size; dactyli short, the one slender, hook-like, the other moderately inflated with outer margin smoothly curved. Terminal segment of scratch-foot three times longer than wide, the short terminal seta gently curved, one-third length of segment. Caudal ramus straight, twelve and one-half times longer than narrowest width, dorsal margin smooth; dorsal seta absent, but with a papilla marking place where seta ordinarily is found in the genus; claws curved, very slightly subequal, weakly denticulate near tips; terminal seta well developed, almost three-fourths length of terminal claw.

Ejaculatory duct with five crowns of spines. Penis globular with two sub-equal terminal lobes, the larger triangular with pointed apex, the other more slender, smoothly rounded distally and curved toward apex of larger lobe.

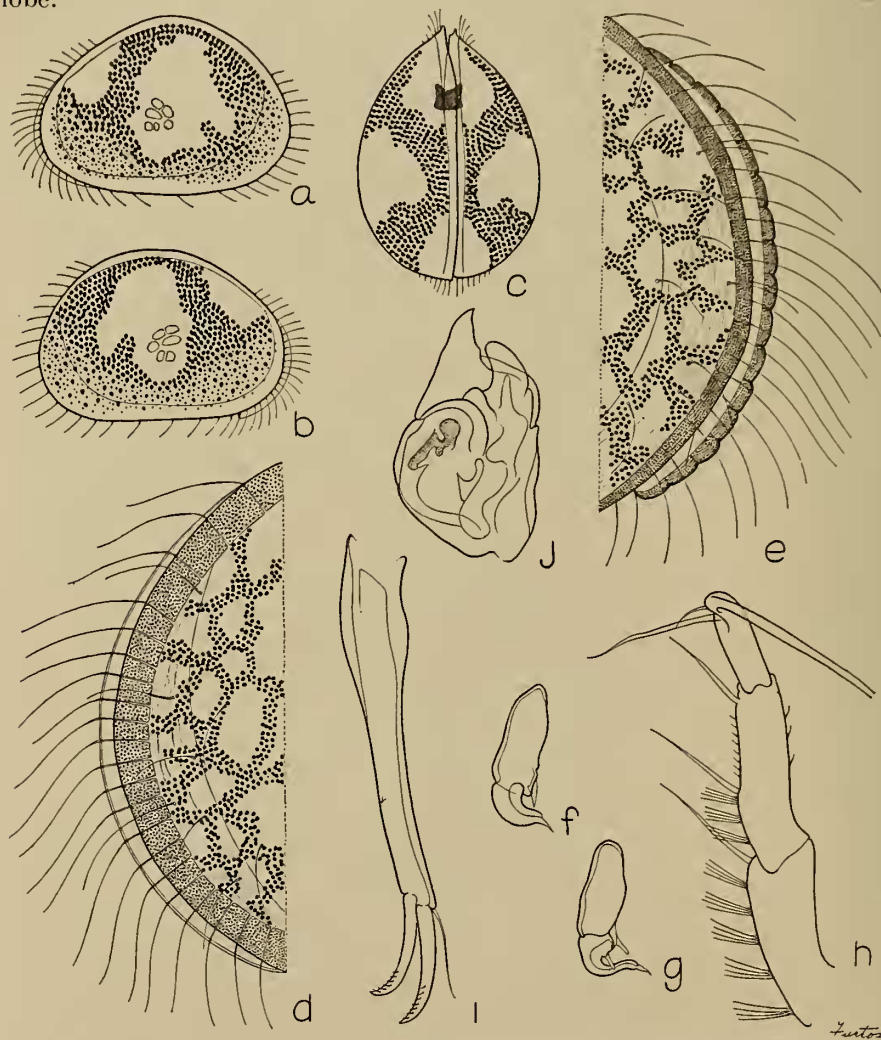


Fig. 4.—*Cyclocypris cruciata* new species. *a*, left valve, adult male; *b*, right valve, adult male; *c*, adult male, viewed from above, *d*, anterior extremity, left valve; *e*, anterior extremity, right valve; *f*–*g*, prehensile palps; *h*, scratch-foot, male; *i*, caudal ramus, male; *j*, penis.

Female unknown.

Occurrence—Cape Cod: Type locality, Marston's Mills Pond near Hyannis (June 9, 1933) where several males were taken. An empty shell was taken from a marsh between Barnstable Village and East Sandwich on the same day. Otherwise known from Lake Chautauqua, New York, where several males were collected by the author Aug. 12, 1932. Male holotype. U. S. Nat. Mus. No. 71416. Paratypes, U. S. Nat. Mus. No. 71417.

Cyclocypris ampla Furtos, 1933

Cyclocypris ampla Furtos, Ohio Biol. Survey Bull. 29. (Vol. 5, No. 6): 461-462, t. 14, figs. 1-7. 1933.

This is the largest of the known species of *Cyclocypris* occurring in North America. Length 0.7-0.8 mm. Readily identified by its size, very tumid valves and glossy chestnut-brown color which on closer examination appears as densely situated brown speckles on yellow-brown background.

Occurrence—Cape Cod: Deep Pond at Hatchville (June 23, 1933). Otherwise known from Ohio and Lake Chautauqua in New York.

Cyclocypris laevis (O. F. Müller, 1776)

Cypris laevis (part.) O. F. Müller, Zool. Dan. Prodr.: 198. 1776.

Cyclocypris laevis Sars, Crust. Norway 9: 93-94, t. 43, fig. 2, 1928.

non *Cyclocypris laevis* Sharpe, Proc. U. S. Nat. Mus. 35: 408-410, t. 50, fig. 5; t. 54, figs. 5-7. 1908.

A widely distributed form often confused with *C. ovum* (Jurine) and *C. serena* (Koch). The specimens taken from Massachusetts agree quite well with figures and description given by Sars (1928). Characterized by small size (0.5 mm. in length for female) more gibbous than *C. ovum* when viewed from the side, surface of valves delicately speckled with brown. Viewed from above, anterior extremity pointed, the posterior broadly rounded, greatest breadth distinctly behind middle.

Occurrence—Hampshire County. Otherwise known from Europe and Central Asia.

Tribe CANDONINI

Genus CANDONA Baird, 1842

Candona caudata Kaufmann var. **ciliata** n. var.

Fig. 5

Specific characters—*Female*, from the side: Elongate-reniform, height about one-half of length, highest behind middle; ascending slope of dorsal margin gently arched to rounded apex, descending slope steep, producing truncate appearance to posterior portion of right valve; anterior extremity broadly rounded, posterior extremity narrower; ventral margin sinuate; infero-posteal region of left valve with ventral sinuation producing a somewhat projecting postero-ventral prominence, this region of right valve without such prominence; submarginal line removed from entire free margin, more widely removed along posterior margin, pore-canals each bearing a slender marginal hair. From above: Moderately compressed, sides rather unevenly curved, breadth somewhat less than one-half of length, broadest behind middle; anterior extremity pointed, the posterior narrowly rounded; left valve projecting beyond right at each end. Surface of valves with a few small scattered tubercles, those near extremities bearing slender hairs. Length 0.93, height 0.48, breadth 0.41 mm. Medial-distal seta of penultimate mandibular palp-segment smooth. Penultimate segment of scratch-foot divided, shortest terminal seta pectinate, three times length of terminal segment. Caudal ramus gently curved, thirteen times longer than narrowest

width, distal half of dorsal margin ciliated; dorsal seta three-fourths length of subterminal claw, removed from claw by three times width of ramus; claws subequal, gently curved, delicately pectinate, the terminal slightly greater than one-third length of ramus; terminal seta one-fourth length of

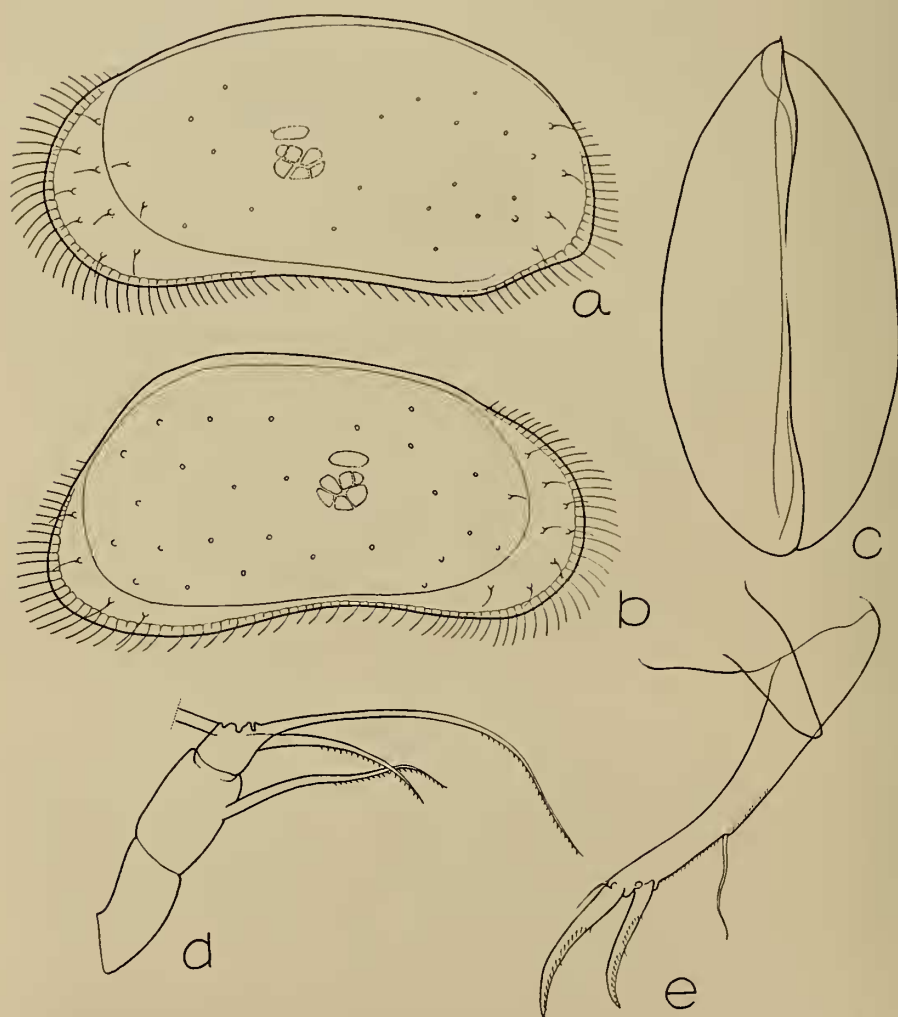


Fig. 5.—*Candona caudata* var. *ciliata* new variety. *a*, left valve, adult female; *b*, right valve, female; *c*, adult female, viewed from above; *d*, distal portion of scratch-foot; *e*, caudal ramus and genital lobe.

terminal claw. Genital lobes well developed, each with a long finger-like posterior protuberance.

Male unknown in adult condition. Two immature specimens with testes and copulatory organs partially developed were present in the collection from Cape Cod.

This is a smaller stouter variety of the European species. *Candona caudata* as described by Kaufmann (1900) and Sars (1928) differs from the above species in the fact that right valve has some indication of postero-ventral prominence and that dorsal margin of caudal ramus is quite smooth. In other respects the North American form closely resembles that of Europe.

The species should not be confused with *Candona intermedia* Furtos (1933) which is also characterized by a similar postero-ventral prominence of left valve. The latter form is much larger (1.7 mm. in length for female), posterior extremity of valves more elongated when viewed from the side and shortest distal seta of scratch-foot four times longer than terminal segment.

Occurrence—Cape Cod: Marsh between Barnstable Village and East Sandwich (June 9, 1933). Female holotype, U. S. Nat. Mus. No. 71420.

***Candona annae* Méhes var. *septentrionalis* n. var. Fig. 6**

Specific characters—*Male*, from the side: Elongated, height equal to one-half of length, highest behind middle; ascending slope of dorsal margin gently curved, apex broadly rounded, descending slope boldly arched; ventral margin sinuate; extremities broadly rounded, the anterior narrower; submarginal zone not apparent. From above: Compressed, elliptical, breadth somewhat greater than one-third of length, broadest behind middle; left valve enclosing right, extending beyond right at each end; extremities pointed, the anterior clearly narrower. Surface of valves smooth with a few marginal hairs. Length 0.92, height 0.46, breadth 0.34 mm. Medial-distal seta of penultimate mandibular palp-segment smooth. Prehensile palps unequal in size, weakly falciform, outer margin of propodi sinuate, dactyli rather short, that of larger palp inflated along outer margin. Penultimate segment of scratch-foot undivided, the shortest terminal seta curved, about one and one-half times length of terminal segment. Caudal ramus straight, fourteen times longer than narrowest width, dorsal margin smooth; dorsal seta approximately two-fifths length of subterminal claw, removed from claw by two and one-half times width of ramus; claws very slender, curved, delicately pectinate, subequal, the terminal one-half length of ramus; terminal seta one-fifth length of terminal claw. Ejaculatory duct with five crowns of spines. Penis triangular with rounded apex, quadrangular lateral lobe and rounded terminal lobe only slightly narrower than apex of base, but projecting considerably beyond the latter.

Female unknown.

The above species differs from *Candona annae* Méhes (1913) in a few minor details. Viewed from above, the latter species is somewhat more pointed anteriorly and left valve projects to a lesser extent beyond the right at posterior end. Viewed from the side proportions and valve-surface of the two forms are identical, but *Candona annae* has in addition a rather definite submarginal zone. Appendages and copulatory organs of the two closely correspond, but terminal seta of caudal ramus is definitely longer, stronger in the specimen from Massachusetts. *Candona annae* was first reported by Méhes for South America with terminal seta of caudal ramus absent. The

author has recently described the species for Florida with this seta very delicate, almost obscure. Presence of a well developed terminal seta, together with absence of submarginal zone on valves constitute the chief characters of the new variety.

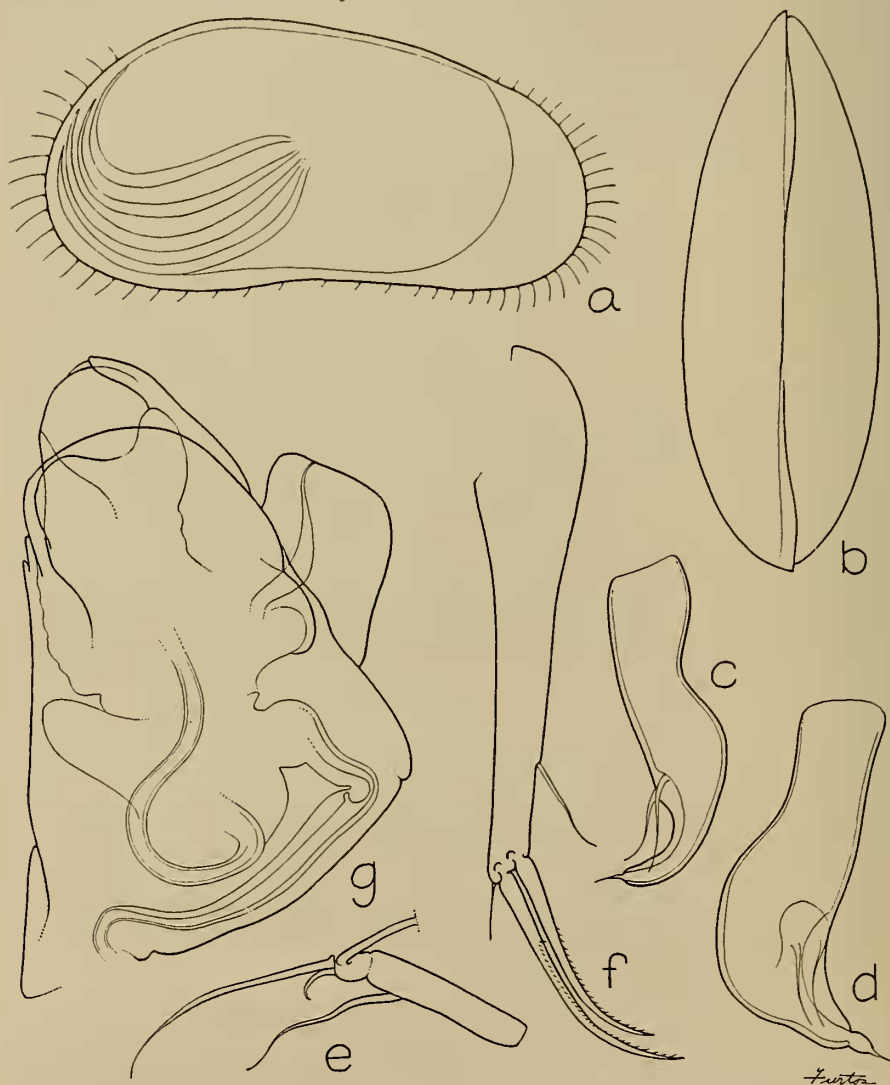


Fig. 6.—*Candona annae* var. *septentrionalis* new variety. a, right valve, adult male; b, adult male, viewed from above; c-d, prehensile palps; e, distal portion of scratch-foot; f, caudal ramus, male; g, penis.

Candona annae should not be confused with *Candona elliptica* Furtos (1933). Male of the latter species is narrower in posterior region of valves when viewed from the side, marginal hairs considerably shorter. Viewed from above, *Candona elliptica* is broadest in middle whereas *Candona annae*

is broadest behind middle. Terminal lobe of penis projects only slightly beyond apex of base in *Candona elliptica* while in *Candona annae* this lobe is very clearly longer.

Occurrence—Cape Cod: Woods Hole in field drainage-ditch (June 12, 1933). Male holotype, U. S. Nat. Mus. No. 71421.

***Candona elliptica* Furtos, 1933**

Candona elliptica Furtos, Ohio Biol. Survey Bull. **29**, (Vol. 5, No. 6): 482–483, t. 12, figs. 1–7. 1933.

An elongated, low-arched, very compressed *Candona* which may readily be confused with *Candona annae* as pointed out in the discussion of the latter species. Length 0.90–0.94 mm.

Occurrence—Cape Cod: Quostinet River at Mashpee where a single male was taken. Otherwise known from Lake Erie region of Ohio.

***Candona punctata* Furtos, 1933**

Candona punctata Furtos, Ohio Biol. Survey Bull. **29**, (Vol. 5, No. 6): 485–486, t. 13, figs. 2–8. 1933.

Easily recognized by stout gibbous truncate form when seen from the side, and by tumid spindle-shape with pointed extremities when seen from above. Surface of valves pitted and covered with long hairs. Length of female 0.85–0.90 mm. Male somewhat larger.

Occurrence—Cape Cod: Marsh between Earnstable Village and East Sandwich (June 9, 1933), woodland pools on Nonamesset Island (June 22, 1933). Otherwise known from Ohio.

***Candona decora* Furtos, 1933**

Candona decora Furtos, Ohio Biol. Survey Bull. **29**, (Vol. 5, No. 6): 477–478, t. 8, figs. 4, 5; t. 9, figs. 21, 22; t. 11, figs. 5, 6. 1933.

Large forms, posterior portion of female valves truncate but with dorsal part of posterior margin somewhat swollen, posterior portion of male valves broadly rounded. Surface of valves appear obscurely reticulate, particularly near posterior extremity. Penis characteristic with conical lateral lobe and small terminal lobe projecting beyond apex of base. Length of female 1.1–1.3 mm. Male slightly larger.

Occurrence—Hampshire County. Otherwise known from Ohio where the species is particularly abundant in temporary leafy pools of Beech-Maple forests near Cleveland. Occasionally in ponds and lakes. Spring.

Subfamily CYPRINAE

Genus CYPRICERCUS Sars, 1895

***Cypricercus splendida* Furtos, 1933**

Cypris (Cypricercus) splendida Furtos, Ohio Biol. Survey, Bull. **29** (Vol. 5, No. 6). 455–456, t. 3, figs. 1–7. 1933.

Large, brightly banded forms readily confused with *Eucypris fuscata* (Jurine) from which it may be distinguished by relatively hairier valve-surface, more numerous surface tubercles and the constant presence of males. Length of female amounting to 1.75 mm. Male slightly smaller, characterized by testis forming spiral coil in anterior portion of valve-chamber. The species should not be confused with *Cypricercus passaicus* (Sharpe, 1903) which according to Sharpe's figures is a blunter form with valves less attenuated posteriorly when viewed from the side, nor with the smaller, more gibbous *Cypricercus tincta* Furtos (1933).

Occurrence—Nonamesset Island in a small pond (June 22, 1933). Otherwise known from Ohio.

Family DARWINULIDAE

Genus DARWINULA Brady & Norman, 1889

Darwinula stvensoni (Brady & Robertson, 1870)

Darwinula improvisa Turner, Rept. Geol. Nat. Hist. Survey Minn., Ser. 2, Zool.: 336, t. 81, figs. 1-3, 13. 1895.

Darwinula aurea, G. W. Müller, Das Tierreich 31: 240. 1912.

Several specimens of this widely distributed species were taken from Massachusetts. The form is particularly interesting in that eggs are not laid, but young reared in posterior valve-chamber of female. A gravid female with young well advanced has been deposited in the Museum.

Occurrence—Cape Cod: Marsh between Barnstable Village and East Sandwich, Lake Leman at Falmouth Heights (both of June 6, 1933). Otherwise known from Ohio, Georgia, Europe, and Asia Minor.

LITERATURE CITED

- CUSHMAN, JOSEPH A. *A new Ostracod from Nantucket.* Amer. Nat. 39: 791-793. 1905.
- Ostracoda from South Eastern Massachusetts.* Amer. Nat. 41: 35-39. 1907.
- FURTOS, NORMA C. *The Ostracoda of Ohio.* Ohio Biol. Survey Bull. 29: (Vol. 5: No. 6): 413-524. 1933.
- HALDEMAN, S. S. *Description of a new species of Cypris.* Proc. Phil. Acad. Nat. Sci. 1: 184. 1842.
- KAUFMANN, A. *Cypriden und Darwinuliden der Schweiz.* Rev. Suisse Zool. 8: 209-423, pls. 15-31. 1900.
- MÉHES, GYULA. *Süsswasser-Ostracoden aus Columbien und Argentinien.* Bull. Soc. neuchateloise Scien. nat. 5: 639-663. 1913.
- MÜLLER, G. W. *Ostracoda aus Java (gesammelt von Prof. K. Kraepelin.).* Mt. Mus. Hamburg. 23: 139-142. 1906.
- SARS, G. O. *An account of the Crustacea of Norway. 9, Ostracoda.* Bergen Museum Pub.: 1-277.
- SHARPE, R. W. *Report on the fresh-water Ostracoda of the United States.* Proc. U. S. Nat. Mus. 26: 969-1001. 1903.
- TURNER, C. H. *Fresh-water Ostracoda of the United States. Part III of Entomostraca of Minnesota.* Rept. Geol. Nat. Hist. Survey Minn., Zool., Ser. 2: 279-337. 1895.